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SCIENCE

FRIDAY, MARCH 25, 1910

THE PROBLEM OF THE ASSISTANT
PROFESSOR.* II

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We now pass to the second division of our subject, which, because of its somewhat broader aspects, requires a slightly different mode of presentation.

Questions 18, 19 and 20 were prepared with a view to elicit information upon the extent of academic freedom and of participation in the solution of university problems, enjoyed by assistant professors.

Says President Eliot in his most valuable and suggestive "University Administration":

For determining the educational policy of a seat of learning, the faculties are the most important bodies in the entire institution. . . . It devolves upon the faculties . . . to discern, recommend and carry out the educational policies of the institution. . . . Membership in a faculty should therefore be limited to professors, associate professors and assistant professors, and to those instructors who have received appointments without limit of time. . . . It is of the utmost importance that every faculty contain enough young men to bring forward in debate the views and feelings of the recent college generation. To have its administration fall chiefly into the hands of elderly men is a grave misfortune for any institution. There is always good work that veterans who retain their physical and mental alertness can do; but the control of a university's policy should not be confided to them alone. . . . By the vitality, inventiveness and enterprise of its faculty, it is safe to judge any institution of learning.

President Hyde, in his refreshing paper on "Personality and College Professors,"⁶ adds to this:

* A paper prepared for the eleventh annual conference of the Association of American Universities, on behalf of Leland Stanford Junior University, by Professor Guido Marx and presented by Professor Charles H. Huberich.

⁶ *The Outlook*, August 21, 1909, pp. 931-7.

Because, in an experience of twenty-four years, I have seen 95 per cent. of all administrative reforms advocated and accomplished by men under thirty-five, I heartily endorse President Eliot's principles of juniority as the distinguishing mark of a progressive as distinct from a stagnant institution.

The three university presidents, of those not now in service, who have exerted the greatest formative influence upon the modern American university, are Presidents Eliot, Gilman and White. The first took up his presidential duties at Harvard at the age of 35; the second at California at the age of 41 and at Johns Hopkins at 46; the third at Cornell at 35.

In view of the foregoing facts, the extent of participation by men of 37 in the direction and control of educational policies of the several universities, disclosed by the following typical answers, is enlightening. The replies were formulated from a few more than a hundred received from twenty institutions. Unless otherwise stated, three or more answers were received from the institution. A composite reply is arranged, to give the range of replies from each individual institution, as representing the point of view of the assistant professor.

Query 18*a* was: "What are your opinions concerning the status of the assistant professorship in sharing in the determination of general policies of your institution?"

The replies:

1. "The policies of the university are really shaped by the president." "Assistant professors have a vote in the council, just as the full and associate professors have. They do not often initiate movements or policies, but have the full right of discussion, voting, etc." "Nothing more to be desired."

2. "Assistant professor has status a little above janitor." (Less than three replies.)

3. "Fairly satisfactory here." "They should have a full share in administrative and depart-

mental policy, because unless they have such a share, with its responsibilities and the recognition resulting from it, the better part of their experience, idealism and progressiveness is wasted."

4. "Fairly satisfactory." (Less than three replies.)

5. "Satisfactory." "They have as much influence, nearly, as full professors." "They have little share in the determination of general policies."

6. "There are no differences [between assistant and full professors] in these matters." (Less than three replies.)

7. "Very little direct influence at present." "He has a seat and voice in his college faculty, but not in the general university senate." "Not much share."

8. "Have a vote in faculty meetings." "Share but slightly in the determination of general policies." "Only through suggestions to the head of the department." "General policies are determined largely in meetings of the faculty heads of departments."

9. "No voice whatever in determining institutional policies." "At present assistant professors have no share." "None."

10. "Very little." "Mostly in hands of the deans." "Think assistant professors little less powerful than full professor. Believe a suggestion from either would be considered by the administration with equal care." (Note inference to be drawn from this last sentence. A side-light is thrown by the volunteered statement of one who left this institution for a larger one: "Conditions in this respect were highly unsatisfactory at ———.")

11. "Not being member of council, can not answer." "Believe most assistant professors to be of ripe enough age and sober-minded enough to give some good ideas." "No discrimination save in excluding new assistant professors from council for three years." "It is all it should be."

12. "Almost no share." "Has little influence; mostly done by older men." "Mostly in hands of heads of departments. Here the elder statesmen are in control."

13. "As a rule, given altogether too little say." "Is given no say in policy of institution." "Should be heard in regard to such questions." "Has a vote in all faculty actions." "When a division is called for in faculty meeting, professors have two votes, assistant professors one vote and instructors no vote."

14. "Satisfactory in all respects. Depends entirely on his individual ability." "As to general policies, all assistant professors have a vote, as well as professors and deans, in the council."

15. "Left to heads of departments." "Incidental [share] only." "Should be given full vote on questions pertaining to institution policy." "The assistant professors are members of the general faculties in which they teach."

16. "Should have a vote in all matters submitted to members of the institution." "I am in the council which determines the policy. Am elected by confrères below rank of clinical professor. Other assistant professors are members of the 'faculty,' which is without power of initiative." (Less than three replies.)

17. "My share is as large as that of the average full professor." "In my case I can see no difference between assistant and full professors in this respect." "We enjoy all the privileges of full professors, but receive smaller salaries. It seems to me that is about the only distinction here."

18. "Depends upon personality and attainments of the assistant professor." "They have a great deal of influence here with us, and vote in faculty and committee meetings just as full professors do." "Perfectly satisfactory."

19. "An appropriate share." "Have votes on all questions in faculty meetings and serve on many important committees."

20. "No influence." "General policies are determined entirely by the full professors."

The foregoing replies show considerable range of institutional policy. Taken with their contexts (necessarily omitted here) they also disclose a prevailing conception of a faculty, as a body scarcely so important and influential in its functions as the ideal quoted from President Eliot at the beginning of this section. In this light, such apparently discrepant answers as, for instance, those grouped under institution 5, fall into harmony, and so interpreted would mean that the faculty, as a whole, bears but small part in shaping policies, but in that part the assistant professors have nearly the influence of the full professors.

Our next query is directed at one of the

most sensitive points in the present-day university organizations—the status of the assistant professor in sharing in the determination of departmental policy, curriculum and assignment of courses. The replies are grouped by institutions, although, under the prevailing system of departmental organization with permanent heads possessing ill-defined powers, it is natural to expect greater variations within the individual institutions, according to the interpretation of their duties by the various department heads.

Query 18*b*, replies:

1. "The head has absolute power." "According to the disposition of the head of the department." "Departments vary in this university. In some it is done by conference and general meetings. In some (——— *e. g.*) we are called upon occasionally for suggestions in writing, all decisions resting with the head of the department. We have had about three department meetings in fifteen years. We get in writing our assignment of courses and hours from the head of the department." "Departmental policy (——— department) very democratic. Majority of questions determined by vote of entire department. Individual wishes consulted wherever feasible."

2. "Is consulted about only his own courses." (Less than three replies.)

3. "Fairly satisfactory."

4. "Satisfactory in my department." "Very pleasant relations with the head of department." (Less than three replies.)

5. "Considerable, but (in general) insufficient share." "They have little to do with it. The system of departmental headship is to blame for this. This is the most detrimental arrangement within our universities at present." "Unsatisfactory. Too much power is centered in the head of the department. The assistant professor given little chance to influence departmental policy." "Have been practically full professor except in salary."

6. "No difference [between assistant and full professors] in these matters at ——." "Should have an advisory capacity, but determination of course of conduct should be in hands of heads of departments." (Less than three replies.)

7. "Not much share." "He is usually con-

sulted, but there is no formal obligation to consult him." "In our department, the assistant professor is an important factor in all departmental policies, and helps form these policies." "A large share."

8. "In departmental policy more attention is paid to his suggestions [than in general policy]." "My opinions are given careful consideration." "Have great range of liberty. The professor is one of the best in this regard that I ever knew." "Departmental policies in the ——— department at present determined by the two heads. Have poor opinion of any two-headed arrangement." "Such things should be determined by conference of all members of the departmental staff."

9. "Good in some departments, poor in others." "Share to a very limited extent." "Am freely consulted by the head of the department relative to all matters of departmental policy." "Should have a vital part." "Should be consulted."

10. "No share." "Voted upon in general faculty meetings." "An equal voice, almost, as to departmental affairs. Great freedom in expression of opinions, etc." "We are very democratic in the department." "Should be consulted, and, I believe, is here."

11. "Depends upon the department." "Not given enough responsibility to give them an active interest in the administrative work of the institution, or to encourage loyalty to it." "Should have voice in planning work and getting just recognition for what they do." "Suggestions have been received for all they were believed to be worth—perhaps not all I thought." "I have as much voice in these matters as if I were a full professor." "Well off in this respect." "All it should be." "In ——— department conditions practically ideal."

12. "Its influence felt a little, but not much." "Very little; not consulted at all." "Influence in proportion to favor enjoyed in eyes of head of department."

13. "Shares none too much." "Very little say." "Should be heard in regard to such questions." "Should be subject to the head of department." "In ——— department, have a voice determining departmental policy." "Too many professors think they should have sole control. 'Their policies might be disrupted.'"

14. "In the large departments his influence is small in determining [these matters]; in small departments he very often takes the place of the professor or head of the department in this line of work. In many cases has entire charge of

department and is assistant professor in name only." "I have independent charge of [my field]." "In our department we have voice in the determination of the nature of the work." "The professor of ——— here decides all matters of departmental policy, curriculum and assignment of courses."

15. "In my department the head makes his own policies and assigns courses, but in some departments the assistant professors are consulted." "Suggestive share." "Should be consulted and allowed to help in this part of work."

16. "Should be consulted in the same way as any full professor not head of the department, and should have a vote in all matters submitted to vote of members of department." (Less than three replies.)

17. "No difference here in these matters between assistant and full professors."

18. "They have a great deal of influence here." "Am running the department pending a future policy to be settled in which I have some voice. In other departments assistant professors have advisory functions and are given considerable freedom on the average." "We have some voice—yet the dean has things about his own way." "Share equally with full professors." "Perfectly satisfactory."

19. "Depends largely upon the department head. In my own department the assistant professor is treated on his merits as a man and has as much influence as he deserves. This is not true in many other departments." "Seldom consulted." "Has a full share in departmental matters." "Made to feel that he has a voice in the government of the university and much at stake in his own department." "In general the assistant professor's position in these matters is entirely satisfactory."

20. "In general, little or none." "Much influence in departmental policy."

On the whole, these results, while showing more free participation in departmental than in general university matters, still disclose a state of affairs far from generally democratic.

The next query (18c) was in regard to the freedom enjoyed by the assistant professor in the conduct of individual classes. Here the replies are much more uniform, disclosing, in general, a gratifying condition of entire freedom, within the limita-

tions necessarily imposed by correlation of departmental work. There is, however, a plentiful sprinkling of "Should have control," which sounds as if the wish rather than the possession were father of the thought; and also others, of which the following are selected as typical: "None." "Given, usually, freedom in conduct of my classes." "A marked tendency on part of head to urge his own methods." "The professor of ———— decides the texts to be used and the amount of work to be covered." "The presence of his superior in the room (as is the case in some departments) overseeing his work is, to express it mildly, damnable." "In general, not enough freedom is allowed in those courses which require several sections taught by several men." By way of variety, one reply suggests: "Possibly less freedom and more supervision in some cases might be better."

The aim of query 19 was to disclose the conditions of nature and amount of work required, and whether these reasonably favor carrying on advanced work and intellectual growth. Eleven blank or non-committal replies were received. Exactly 50 reported conditions from "reasonably" to "extremely" satisfactory. Fifty-one reported conditions as unsatisfactory for one or more of the following reasons: Excess of elementary work; correcting exercises; preparation of laboratory material; committee work; inadequate equipment or library; heavy schedule of instructional work; lack of presence and inspiration of advanced students, and pressing need to spend all available time in supplementing salary.

The actual amount of scheduled work seldom ranged below 10 hours, while as high as 18 appears to be the rule at some of the institutions; as high as 20 is reported and 15 is not uncommon. Here are

a few typical, significant replies: "Have ideal research position." "So many do not take advantage of the existing opportunities that I should suppose a reduction of routine duties would not be of advantage to the university." "Conditions not favorable to research beyond that necessary to do teaching well." "Have had almost no time for past five years for research or investigation." "Nights, holidays and vacations must be used for advanced work instead of recreation." "An excess of work is not forced upon us, but it is at hand, and the conscientious man does it to the detriment of his own studies." "It is only by working to the limit that I am able to carry on any research work." "The nature and amount of work demanded of me have made me deem it necessary to aim at good teaching. This has been favorable to intellectual growth but not to research." "The heaviest part of the burden of routine teaching work is borne by those below the rank of professor. There is, however, good opportunity for research and advanced work, if one could be relieved of the awful feeling of lack of material provision for the future, and of family responsibilities not adequately met in the present."

The twentieth question was: What are the conditions governing tenure of the assistant professorship, and are they the best for reasonable independence of thought and action? Typical replies are here grouped, not according to individual institutions, but according to the seven prevailing systems of tenure. In the outset it should be stated that, judging by the entire lack of mention of such in the replies, influences upon tenure from outside the university are gratifyingly non-existent.

1. No fixed policy.

"We have no fixed policy. Would be more

satisfactory to plan for the future with more certainty."

2. Indeterminate. Continued from year to year.

"A man's tenure depends upon his worth." "Assistant professors are not supposed to have independence of thought and action. They are treated as mere assistants just out of college." "Wholly dominated by head of department." "I believe in some cases the institution might be better served if there were not so much independence of thought and action indulged in."

3. Annual appointment.

"The tenure of office depends, if I mistake not, on the wishes (1) of the head of the department and (2) of the president. The actual appointment is for the year only. The condition is unfortunate. It can not tend to independence of thought and action, but only the reverse. It cultivates subservience, toadyism. Its ill effect is intensified by the fact that the assistant professor has no open market in which he may offer his wares; an 'agreement in restraint of trade' virtually exists among leading universities." [?] "The under men are at the mercy of the head of the department, and must submit to any treatment if that head is autocratic or overbearing. Some heads keep their men reminded that they may lose their positions." "Until . . . I cringed and trimmed and was not half a man in my own esteem. I know dozens who are fawning because they feel it necessary." "One can not know whether he is to be dropped out at the end of the year or not. To establish anything like a permanent home seems out of the question." "I think that a three- or five-year term would be preferable, but, if the president is a competent person, I do not regard the matter of great importance." "Continuance in position and promotion are automatic, provided incumbent's efficiency is reasonably maintained." "All that should be asked for."

4. Three years.

"Reasonable for a first term." "Just a little better than one-year tenure." "This seems to me reasonable and fair and theoretically most stimulating for good work." "I am inclined to think that, for one thing, under the three-year tenure worry over future possibilities more than offsets any advantage of stimulus to do good work as means of retaining position." "Conditions by no means best. When I lost out at ——— I had a contract with the president and regents for three years, and two of these years were yet before me. It was deliberate breach of contract. . . . I was never allowed to face my accusers, nor do I know

who they were. When I expostulated with the dean, he bullied me. I am not a fighter and could not stand up for myself. He literally bullied me out of the university. . . . The moral shock of this experience I never shall recover from." "I know of no restrictions on thought and action except in a few departments, the heads of which are inclined to be domineering." "In my institution the assistant professor is theoretically independent, having (after three years) an equal voice in the council and the department. Practically, however, he is dependent on the good-will of the head of the department. In the two vital matters of salary and promotion he has no personal access to the president, with whom the formal initiative rests, but is obliged to depend upon whatever representations the head of the department may choose to make. The latter's written recommendation is necessary to promotion, and his report is indeed the basis of all action taken by the president in reference to an assistant professor." "It would seem that the work of the assistant professor should be estimated by more than one person (usually the head of the department) and that some systematic method should obtain by which the appointing and promoting powers should be made acquainted with this work from more than one point of view." "I should say they are here what they are everywhere else: making oneself generally agreeable and setting up no opposition to superiors. Thus are fostered obedience, patience, self-control, submergence of self—all cardinal virtues. Independence of action is not for the assistant professor—his thoughts are his own." "In my experience the conditions are not the best for independence."

5. Four years.

"It is a temporary appointment for four years, and hence in a few cases operates to suppress independence of action and thought, though in most cases I see no such difficulty. Tenure usually depends on good work and usual standards of conduct."

6. Five years.

"Appointments for term of five years each; ordinarily leading to a professorship at the end of the second. There is entire independence." "Tenure dependent upon 'making good.'" "Have had no anxiety about reappointment." "Fact of reappointment being uncertain even though probable, militates against absolute independence of thought and action."

7. Permanent (sometimes after probationary term).

"Utmost freedom." "Removal for cause only." "If I understand the conditions, they are: Good behavior, efficient teaching and reasonable intellectual growth. If this is correct, I think they are the best possible."

No comment is necessary, beyond calling attention to the fact that undue subordination is destructive of character of both subordinate and superior; and conditions which tend to foster it should be tolerated no longer than it will take to get rid of them.

So much for the existing conditions as viewed by the assistant professors. We may compare our impressions from their conclusions with this by President Eliot:⁷

The young American who chooses a university career must then abandon all expectation of riches, and of the sort of luxuries which only wealth can procure. What he may reasonably expect is a secure income, a life-tenure, long vacations, the gratification of his intellectual tastes, good fellowship in study, teaching and research, plenty of books and a dignified though simple mode of life.

We now turn to their suggestions concerning the problem of the assistant professorship, looking toward higher individual or institutional efficiency. These have been grouped as well as may be under separate headings and the most revolutionary one is here given the place of honor:

1. Abolish the assistant professorship.

"Let the instructor be a temporary appointee. After he has clearly proven his ability let him be appointed to a professorship. The instructor should have little or no voice [in administrative matters or those of educational policy] while all the professors should be on an equality."

2. Appointment.

It is urged that the dignity of the position could be increased by the exercise of greater care in appointment, that the aim should be to get good men and then to give them plenty of opportunity for development, holding them responsible for results; and not to be overparticular about degrees and publications. There is nothing very radical here.

3. Clear understanding of status.

⁷ "University Administration," pp. 98-99.

Policies should be well-known, clear-cut and loyalty insisted upon; these men wish to cooperate and to that end desire that they be given the confidence of their seniors, and not to be kept intentionally in the dark as to the possibilities of their position or the scope of their work. "Each man (president, professors, instructors, etc.) should have a better understanding with all his associates as to what specific purpose in the world he is trying to accomplish, and in what details he is responsible and in what details only an agent. The whole to be open and aboveboard."

4. Facilities.

In addition to such criticism of limitations of library or lack of equipment from which all members of the staff suffer alike, the assistant professor feels that his needs of office and research room and occasional clerical or stenographic service are overlooked.

More serious than this is the complaint that he has no voice in making up the department budget and that, as a consequence, serious injustice is sometimes done his classes and himself by an indifferent or unfriendly head of department. In the following quotation I change the actual figures—to prevent identification—but retain their essential ratio:

"Our department has \$5,000 this year for current expenses. Although second in rank in a department of five men, my grant was only \$85. This sum was soon exhausted, and from ——— until next July my laboratories must get along as best they can without funds. In this matter the head of the department has absolute power, from which there is no appeal."

The failure to include in book-lists those which the assistant professor requires for his advanced work and growth is also not unknown.

Facilities for the publication of longer, more ambitious work, rather than short papers, are inadequate. There are occasional instances where he has been urged by the superior, upon whose good-will the permanence of his position and advancement depend, to undertake such a task and upon its completion face the necessity of paying a large sum toward its cost of publication out of his scanty resources.

5. Schedule and curriculum.

The burden of instructional work is too heavy to encourage or even, in many cases, to permit research work. The suggestion is made that there is too great a variety of undergraduate courses offered.

The men should have some share in the advanced

courses and must be given entire control of the conduct of their own classes except for the natural limitations imposed by the need of correlation of courses. They should be free as to methods, but held strictly accountable to the university for results.

6. Tenure.

The comments on tenure leave no doubt that a short term—like annual appointments—dominated by the head of the department is not wholesome and should not be tolerated. Probationary service, either in rank of instructor, or one term as assistant professor, is recognized as necessary and desirable; but a continued state of uncertainty is demoralizing. No institution—even for the gain of apparently frictionless administration—can afford to pay the price in injury to dignity and character disclosed by some of these letters.

7. Promotion.

The standards for promotion should be formulated, openly stated, and adhered to. It is urged that recognition be given to teaching ability and that promotion depend not solely on research work when the burden of teaching makes this so generally impossible. "Promotion should not depend upon aggressiveness in cultivating friendships of those in authority, popularity with students or alumni, capacity for routine administrative work, or the personal favor and persistence of the head of the department." Character, personality, ability and reputation in the world of scholars should be the determining factors. Uniformity of standards in the different departments is highly desirable—the prevailing systems of indefinite tenure and recommendation by department heads tend to make as many different standards within a single university as there are heads. Each man's case should automatically come up for consideration at fixed intervals and at these times he should be given an opportunity to present such evidence of fitness for promotion as he may feel he has to offer. The conclusions as to his position should then be clearly stated to him.

8. General faculty status.

The faculty should be the supreme academic body. There should be more team-work and cooperation throughout. These men should have a voice and vote in determining the general educational policies. Fear need not be entertained that they will be too zealous or aggressive in the presence of older men whose judgments they have learned to respect. They wish to feel themselves a vital part of the institution and not mere

employees. They wish to learn about these matters so that they too can give them intelligent consideration, get a view of their work in its broader aspects and relations, and receive some systematic training for the duties and responsibilities of higher positions. They have no desire to displace the older men—nor even to intimate that younger men have a great many new and invaluable ideas—but they do feel that a gain may come to an institution in preventing an attitude of settled convictions and consequent lack of further interest in its problems, by injecting a constant stream of fresh blood. To counterbalance their lack of academic experience (after seventeen years as students and teachers) they offer an "idealism which has not been too rudely shaken."

9. Department status.

One of the tragedies of life is the way we are continually closing the doors behind us and forgetting the lessons which our experiences should have taught us. Nowhere, in this study, has this fact appeared more clearly than in the delicate matter of department organization. It is well, therefore, to listen to the voice of our composite assistant professor on this subject: "The assistant professor should have a voice and vote in all departmental matters as a matter of right and not merely as a concession of the head of the department." "I regard a democratic organization of the departments, with full discussion of concrete problems of instruction, as of the highest importance. Without it proper cooperation of different instructors can not be obtained. It indirectly contributes to an intelligent discussion of general educational problems in faculty meetings." "The president to be the head of each department and to see that the men in all departments have uniform treatment." "The organization at ———, of departments with heads having large powers, is prejudicial to professors and assistant professors who are not department heads. A democratic organization of departments would be much more healthy—less immediately efficient but sounder in the long run."

In a democratic society the presence of a privileged class, or of one a considerable portion of which feels itself deprived of natural participation in affairs with which it is vitally concerned, is not wholesome. The solution of this vexed problem, already reached and long in satisfactory operation, at one of our leading institutions, seems to be a democratic departmental organization, having a

chairman, of strictly limited powers, on temporary appointment to the post.

10. Salary.

A general increase of salary in this rank is an imperative necessity; sufficient evidence of this has been presented. The cost of living has increased 50 per cent. in the period of teaching service of these men,^{*} the requirements for promotion to the rank are much higher than they were twenty years ago, but there has been little change, on the whole, in the average rate of compensation. The gap between the salary of the assistant professor and that of full professor has, furthermore, greatly increased, thus adding to the difficulties of the former; for the compactness of the university community is well known. By taste, training, ability, aims and aspirations, all belong to one social class, with practically similar demands and obligations.

The institution, as well as the men, is loser by the present low standard, as a low mental tone is induced by worry; there is much loss of time in earning the necessary supplemental income, not to speak of the unfortunate dissipation of interest and energy; there is prevention of growth and development; save for single men the salaries are inadequate to provide books, necessary equipment, travel, attendance at meetings of learned societies and associations, or to permit the taking of a sabbatical year. In this latter regard, a sabbatical half-year on full pay is urged. The inadequacy of the salaries is driving many good men from the profession. "So much is this true that I am now seriously debating whether to resign now, and practise my profession, or to wait another year for a possible call to some other place." Or this, from a letter of one who had already resigned before the questionnaire reached him: "While I would rather teach than do anything else, and expect to continue in that work, it must be along clinical lines, and my living must come from my practise. In other words, teaching *per se*, particularly in the fundamental sciences, is a very much underpaid profession—certainly not sufficient for the support of two persons with the possibility of additions."

A definite and adequate salary scale is a bitter necessity. Parenthetically it may be stated that an average readjustment of 3 per cent. of the total annual budget would probably suffice to relieve the situation in this rank.

^{*} See "Bradstreet's," December 9, 1899, and November 13, 1909.

In summing up the aspirations of these men, I can do no better than to quote the words of the late President Canfield:

The three controlling desires of every normal man seem to be:

First, to live. Not merely to exist. Almost any one can exist in these days and especially in this country of ours. Mere existence is so easy and so common that a failure to secure this becomes noteworthy: the starvation of a single person in a population of nearly eighty millions becomes at once such an item of news that it is wired from one end of the country to the other and is commented upon by the daily press under special headlines. But the normal man desires something more than existence. He desires to live, in the sense that he wishes his fair share of those things which give color and meaning to his century. His home must be more than a mere shelter; it must be convenient and attractive and satisfying. His clothing must be such as to spare him the unfavorable comment of his fellows. Steam and electricity must minister to him, directly or indirectly. The current press must be at his reasonable command. Of libraries and art galleries and museums he must have the privilege of use, and his necessary labor must not deprive him of the opportunity of enjoying that privilege. He must be able to make his house a home by adding a hearth—and there is no hearth for a man but the heart of a woman. In a word, he must be able to live as a breadwinner and husband and father and good citizen ought to live. This is not only his own right, but the rightful demand of the welfare of the entire community.

Second, to be a man among men. He is not to be content while he remains unrecognized and unknown. He is not simply a unit to be counted, but a man to be weighed and reckoned with. He wishes to stand shoulder to shoulder with his fellows, to look level in the eyes of other men with a sense of equality and power, to feel that his experience and his observation and his resulting opinions are of value to the world and the value is recognized, that men hesitate as to certain undertakings until they know where he stands. He will not admit that he is only a fraction of a man, but insists that he is at least one of the full integers which make up the sum of life. He is not to be a flint that never strikes fire. His nature desires and demands the esteem and the regard and even the affection of his fellows.

Third, to do that which will endure. He will have no part in oblivion, he is unwilling to be forgotten, he can not abide the thought that his work is to perish, that all that to which he has given his time and strength and thought and power comes to an end simply because his body dies. He wishes to project his temper and his purpose and his plans into the future, to find in this way and even here the beginnings of immortality, so to labor that at least a part of his finite product may be worthy to be woven in and in with the divine plan and thus become lasting and infinite.

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(To be continued)

THE ELEVENTH INTERNATIONAL CON-
GRESS OF GEOLOGISTS, STOCKHOLM,
1910

RESPECTING the progress of the arrangements for this congress, which is to be held in Stockholm, August 18-25, the secretary-general of the congress has given the following information (February, 1910):

The deliberations of the congress will principally concern the discussion of the following questions:

1. *The Geology of the Precambrian Systems.*—The discussion is divided into the debate of the following special questions: (a) To what extent can it be proved that the characters of Archean rocks are due to a deep-seated metamorphosis? and (b) The principles of a classification of the Precambrian formations, especially as to what extent a classification after age, of local or universal importance, can be carried out. The following gentlemen have hitherto held out short introductory lectures for this discussion: F. D. Adams, Ch. Barrois, F. Becke, U. Grubenmann, J. F. Kemp, A. C. Lane, J. J. Sederholm and P. Termier.

2. *The Abrupt Appearance of the Cambrian Fauna.*—Messrs. Ch. Lapworth, G. F. Mathew, A. Rothpletz, C. D. Walcott and J. Walther have promised contributions on this subject.

3. *The Changes of the Climate Since the Maximum of the Last Glaciation.*—As an introduction to this discussion three Swedish

scientists (G. Andersson, G. De Geer and R. Sernander) published last spring comprehensive descriptions of matters of fact observed in Sweden, which are conclusive for the explanation of the postglacial climatic deviations in that country. These three essays were sent to a considerable number of foreign scientific men that have occupied themselves with the question of postglacial climate, and these gentlemen were at the same time requested to cooperate in an international discussion of this problem. The Swedish Committee desires the cooperation in this international debate in such a manner that from each country but one report on the postglacial climatic deviations observed there should be sent in. In consequence of this invitation already several treatises on the said subject have been sent in and scientists from the following countries have hitherto promised their cooperation: Austria, Belgium, Canada, the Cape Colony, Denmark, Egypt, England, Finland, France, Germany, Hungary, India, Italy, Norway, Russia, Sweden, Switzerland. Reports on the arctic and antarctic regions have also been received.

All the treatises, sent in from the different countries, will be collected in an autonomous work: *The changes of climate since the maximum of the last glaciation.* This publication, which will probably be ready in the course of the month of April, will form the basis of the coming discussion. This work will be sent free of cost to the contributors. Besides, it will also be procurable, at a price not yet fixed, from the publisher, "Generalstabens Litografiska Anstalt," Stockholm 3.

4. *The Iron Ore Resources of the World.*—In the beginning of 1908 the committee of the congress sent to the national geological institutions and to the mining geologists in the different states invitations to take part in an exhaustive investigation of the above question. This request has everywhere met with so much attention that, at present, reports from nearly all the iron-ore producing countries of the world have been received which will be collected in one work: "The Iron-ore Resources of the World." This publication, consisting of